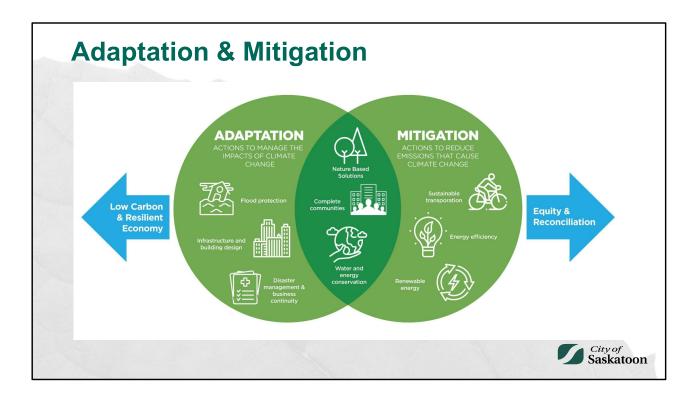


Without global action on climate mitigation and adaptation, the consequences can be severe. But what does that mean for Saskatoon? Global climate models predict a 7-degree Celsius average temperature increase resulting in greater weather variability that is warmer, wetter, and wilder.

Warmer conditions create opportunities for drought, increased pest populations, and wildfires, and will worsen public health concerns.

Wetter conditions will produce more rain and snow.

And Wilder trends speak to an increased likelihood of intense storm events and emergencies due to storms, wildfires, and flooding.



This slide helps to explain the difference between climate mitigation and climate adaptation.

Climate change mitigation relates to actions that reduce our contribution to the greenhouse gases that cause climate change.

Climate change adaptation relates to actions that prepares our organization and community to manage the impacts of a warming climate.

As this figure shows, there are measures that address both mitigation and adaptation...nature-based climate solutions is a great example, which essentially is the use of tools such as restoration, conservation, and management of wetlands, grasslands, coastlines, and forests



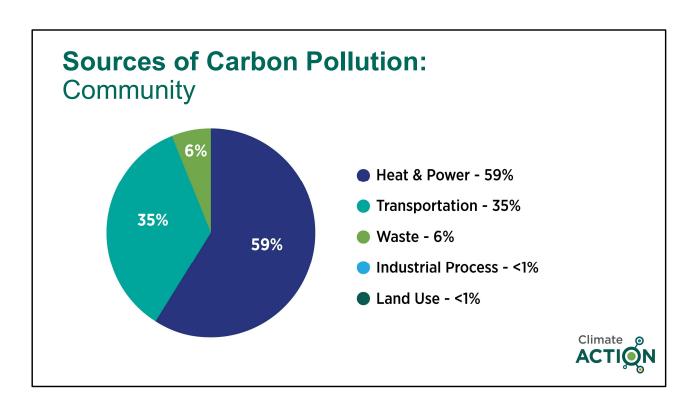
This slide shows the history of the City's climate action work over the past 10 years.

- In 2015, the City signed onto the Global Covenant of Mayors for Climate and Energy, committing the City to taking action on climate mitigation and adaptation activities.
- In 2017, the City set the long-term GHG reduction target of 80% below 2014 levels by 2050.
- In 2019, the City developed the Climate Action Plan with two components the Low Emissions Community Plan (LEC Plan for short) and the Corporate Climate Adaptation Strategy.
- In 2023, the City updated its long-term GHG target to net-zero by 2050.

Throughout 2025 we are updating BOTH the LEC and the climate adaptation plan.

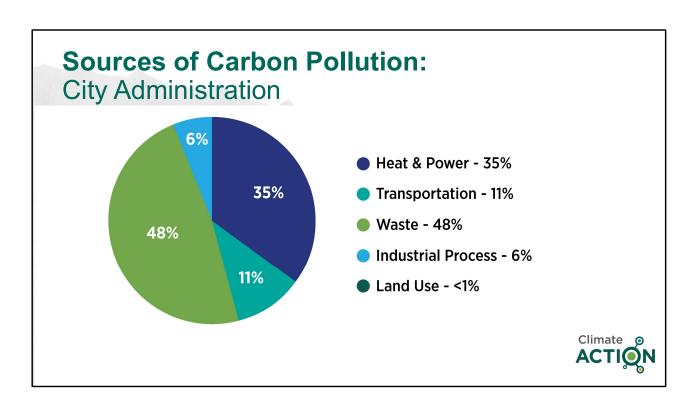
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The most significant difference is that it will be creating a single comprehensive climate plan

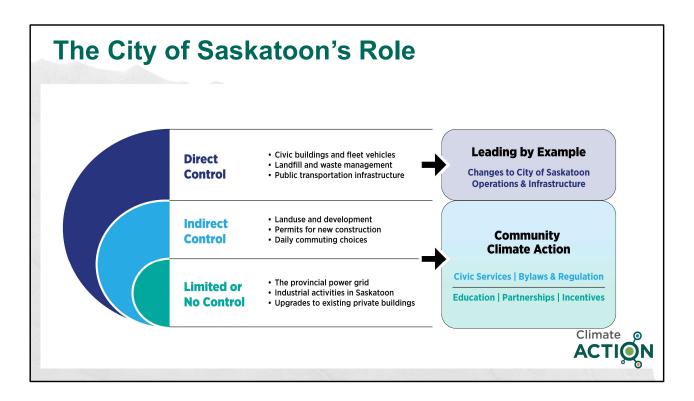


Completing GHG inventories regularly can help us identify trends in emissions as well as opportunities for GHG reductions.

As a community overall our biggest sources of emissions are heating and electrifying buildings, followed by transportation.



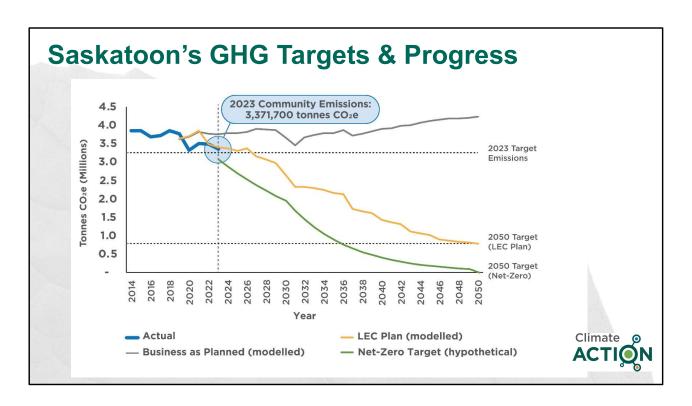
For city operations, emissions from waste which includes emissions relating to landfill and compost operations are the biggest source of carbon pollution with heating and powering buildings being the second highest source.



It's helpful to show what the city's role is when it comes to climate action because there can be confusion around what difference levels of government have control over.

In this slide you can see we have direct control over civic buildings and fleet, landfill and waste management and public transportation infrastructure.

We can't control the behaviors of individuals directly, however, we can influence community climate action through bylaws, services, education and partnerships.

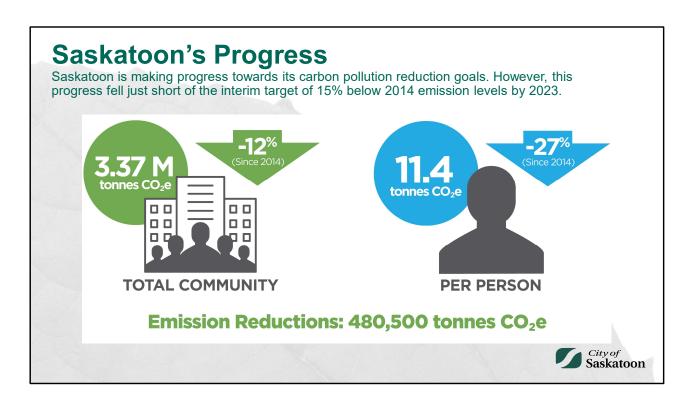


OK, let's talk a bit about our GHG reduction targets.

We quantify GHG emissions through annual inventories to assess how we're doing compared to our GHG reduction targets.

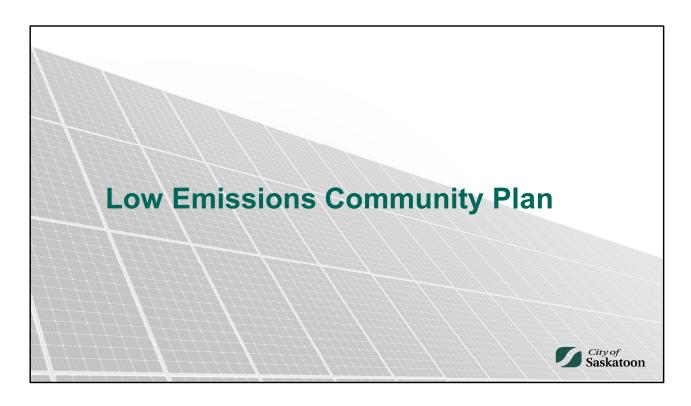
This figure shows the actual community-wide GHG emissions for 2014 through 2023 (blue line) compared to both the 80% target as modeled in the LEC Plan (yellow line) and a hypothetical net-zero target (green line). The projected business-as-planned (BAP) emissions in the absence of action are also shown (grey line).

An update of modeled emissions based on the net-zero target will be communicated through the new Climate Action Plan which will be published in mid 2026.



To show emissions at the individual level this graphic shows in 2023, the community emitted 3,371,700 tonnes CO2e, which is a 12% reduction from the 2014 baseline of 3,852,200 tonnes CO2e.

Per capita emissions are down by 27% since 2014 at 11.4 tonnes CO2e per person (down from 15.6 tonnes CO2e per person in 2014).



Let's look a bit closer at the LEC Plan. Remember the LEC Plan is actively undergoing a refresh and the remodeled plan will be published in mid 2026.

The original LEC plan shows us a path to reach 80% GHG reductions by 2050, not net-zero. However, the actions in the new plan will likely look similar to the current plan...but require faster or more aggressive implementation.



The LEC Plan recommends 40 actions, across 6 sectors, that would allow us to meet our original GHG reduction targets. Like other master plans or strategies, this plan is a roadmap that outlines all the tools that City Council has at its disposal to reduce Saskatoon's GHG footprint. However, each recommended action still has to undergo further engagement, economic analysis, and ultimately approval from City Council before implementation.

Since 2019 the city has been actively working on implementing actions from the LEC plan.

To reduce carbon pollution...

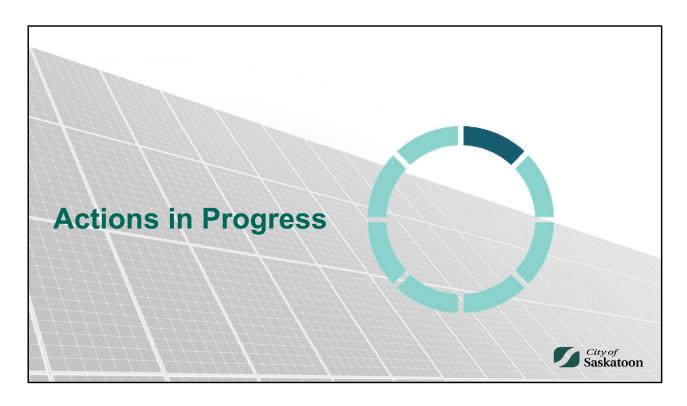
We can...

- Enhance energy efficiency with BETTER BUILDINGS
- Expand low and zero-emission ENERGY GENERATION
- Support diverse **ZERO-EMISSION TRANSPORT** options
- Reduce landfill emissions through WASTE REDUCTION
- CONSERVE WATER to reduce associated energy use
- Conserve, enhance, and grow our GREEN NETWORK
- · Monitor the development of CARBON REMOVAL technologies

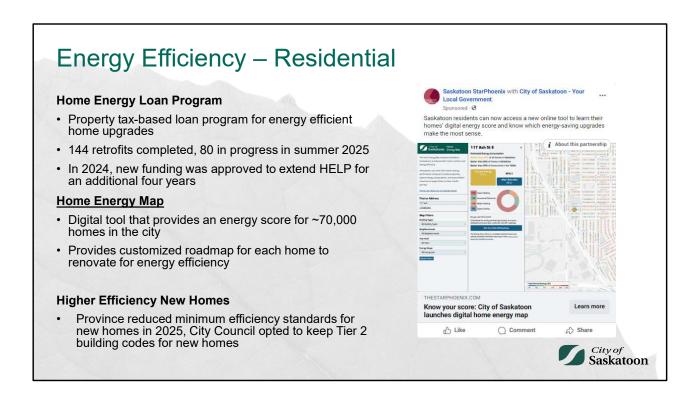


To simplify what the city needs to do to reduce carbon pollution and achieve our targets in the LEC plan we need to:

- Build more efficient buildings
- Generate low and zero emission energy
- Support zero emissions transport like walking and biking
- Reduce landfill emissions by diverting and reducing waste
- Reduce water use
- Expand the green network
- And monitor carbon removal technologies as they become more widely adopted.



So what are the actions underway that we have been implementing?



The first category in the LEC Plan is Buildings and Energy Efficiency. This slide outlines some of the energy efficiency programs and services available for the residential sector. You may have heard of the Home Energy Loan Program (or HELP for short) that has been operating since Fall 2021. This program provides loans to homeowners for energy upgrades like adding insulation, changing windows and doors, and replacing old mechanical equipment. The program is very popular. In 2024, new funding was approved to extend HELP for an additional four years and to broaden the scope of PACE to include commercial and multi-unit residential properties through the Community Energy Loan Program (CELP)

The Home Energy Map is a self-service tool that provides homeowners with a digital energy score for their home, as well as home upgrade suggestions based on the age and building type of the home. The tool allows homeowners to add actual upgrades completed on the home to the website to improve the home's digital energy score. This tool was launched in October 2023 and will be available to homeowners until October 2025 as capital funding is available until 2026. A funding request to continue offering this map has been put forward in the 2026/2027 budget.

The province is responsible for adopting building codes and then the City is responsible for enforcing these codes. Currently across Canada provinces are trying to adopt different tiers of building codes to eventually get to net zero buildings which means a home only uses as much energy as it generates. Long story short, the province adopted a tier 2 building code which means new homes needed to be 10% more energy efficient, but later in 2025 they went back on this and said they would revert back to tier 1. The City disagreed and decided to continue with enforcing tier 2 buildings because that's more aligned with our LEC plan and the cost of building a tier 2 building is negligible ~ \$1-3K but it saves the occupant \$300 per year in utility costs to live in that home!

Energy Efficiency – Civic Buildings

Facility Improvement

- Lighting retrofits completed in 36 civic buildings since 2017, resulting in significant energy and cost savings
- Sub-metering and appliance upgrades, staff training through energy management program

Harry Bailey Aqua Centre

 Renovation work at the Harry Bailey Aquatic Centre includes energy efficiency targets

Ongoing Research & Funding Applications

 2025 application for energy labelling for commercial buildings





For energy efficiency in civic buildings, completed and ongoing work in 2024/2025 includes lighting retrofits completed in 36 civic buildings; renovations to harry bailey aqua center in alignment with our high performance civic building policy, training for staff on energy management and funding applications supporting the adoption of high tiers for the national building code and an energy labelling program for commercial buildings.

Transportation

EV Fleet Conversion

- · 10 hybrids, 5 EVs in regular fleet
- · 15 charging ports at civic facilities
- 3 ZEBs in the transit fleet in 2025, no new EV buses planned before 2030
- 44 station platforms for the City's LINK project under construction in 2025

EV Chargers

 2 EV charging stations installed in May 2023 at Lakewood and Lawson Civic Centres for public use, after Dec 31 there is a fee to use them

Zero Emissions Vehicle Adoption Roadmap

- · Published in January 2025
- Will guide the City's and the community's transitions to zero-emission transportation







Next is the Transportation category, which is focused on electrification.

The City's fleet currently includes 10 hybrids and 5 electric vehicles. To support the City's EV fleet, there are currently 15 charging ports installed at civic facilities. And as of this year there are 3 battery electric or zero-emission buses in operation. The LEC Plan target is for both the regular vehicle fleet and buses to be 100% electric by 2030, however no additional EV bus purchases are planned before 2030. Regarding improving bus services, there was construction on the City's LINK project with station platforms in 2025.

On the public side, we launched two EV charging stations in 2023 – one each at Lakewood and Lawson Civic Centres. Charging at these stations is free until the end of this year. Then the charging stations will still exist but charge a fee of \$5.35 per hour to use.

The City has published an EV adoption roadmap in 2025. This roadmap will guide the City's and the community's transitions to zero-emission transportation.

Waste Reduction & Diversion **Organics** Curbside Organics Program launched in 2023 Bylaw for Business Organics Diversion in effect in 2024 40% organics 57% Material Recovery Center opened in 2023 17% recyclables A free one-stop waste drop-off location for electronics, small 16% other appliances, metals, batteries, tires, bicycles, oil and antifreeze. On wednesday's they also take hazardous waste like aerosols, 27% garbage paint and more! Smaller Black Cart Size Options in 2024 Approximately 19,270 carts were swapped in 2024 and more than 23% of eligible units have transitioned to smaller carts Cityof Waste Diversion Rate at all-time high at 42% in 2024! Saskatoon

Recent highlights in the Waste category include the launch of the curbside organics program and the opening of the Material Recovery Centre at the City's landfill. Both are important with respect to reducing the amount of landfilled waste and extending the life of the City's landfill. The City's waste diversion rate rose to 42% in 2024, largely due to uptake of the Green Cart Program.

New in 2024, households with curbside collection services could choose from three different black cart sizes.

The result was a large uptake in cart requests to reduce their cart size. Approximately 19,270 carts were swapped in 2024 and more than 23% of eligible units have transitioned to smaller carts.

2024 also marked the first full year for the Business Organics Diversion Regulation. The bylaw requirement applies to businesses that produce organic material as part of their operations such as restaurants and grocery stores. Saskatoon businesses have been receptive and compliant with organics diversion.

Water Conservation

Be Water Wise

- Community education and awareness program completed in 2024 by 2026
- Be Water Wise children's activity book distributed through the Summer Play Program

Parks Irrigation

- In 2024, the results of irrigation pilots were developed into a business case for full scale implementation.
- These pilots showed using sensors could reduce water use by 10–30%, saving up to 324 million litres of water, \$800,000 annually

Spray Pad Water Conservation

- Project approved for a \$1.65 million green loan in September 2024 and subsequently received a \$700,000 grant
- The project involves replacing existing spray nozzles with low-flow and misting nozzles, adding remote controllers to modify the sequencing patterns and remotely adjust schedules

Rain Barrel Rebate

• The program issued 248 rebates in 2024 - a 45% increase from previous years.



There is lots on the go regarding water conservation, so I've highlighted the things this group may be most interested in.

In 2024 the launched a large education and awareness program called "be water wise". The website for this campaign has tips for saving water.

In 2021-2023 irrigation pilot projects were done in saskatoon parks using sensors and weather data to manage watering in parks and sports fields. These pilots showed using the sensors could reduce water use by 10–30%, saving up to 324 million litres of water, \$800,000 annually, and 139 tonnes of CO₂ emissions. As a results these sensors are being implemented in all parks throughout 2025.

The Spray Pad Water Conservation and Climate Change Adaptation Project was approved for a \$1.65 million green loan in September 2024 and subsequently received a \$700k Adaptation in Action Green Municipal Fund grant.

This includes an additional \$100,000 because it met the incentive criteria to meaningfully address equity in the work. The project involves replacing existing spray nozzles with low-flow and misting nozzles, adding remote controllers to modify the sequencing patterns and remotely adjust schedules, and adding shade structures, misting stations and water fountains at six sites to help the community adapt to extreme heat.

Renewable Energy

Dundonald Avenue Solar Farm

 The Dundonald Avenue Solar Farm is under construction

Residential Solar Potential Map

 Allows homeowners to see the solar potential for their specific house and provides cost and payback estimates

Community Solar Generation

- 5.25 Megawatts of residential solar capacity in 2024
- Supported through net metering and loan programming



Renewable Energy is the next category. Recent actions completed or in-progress include:

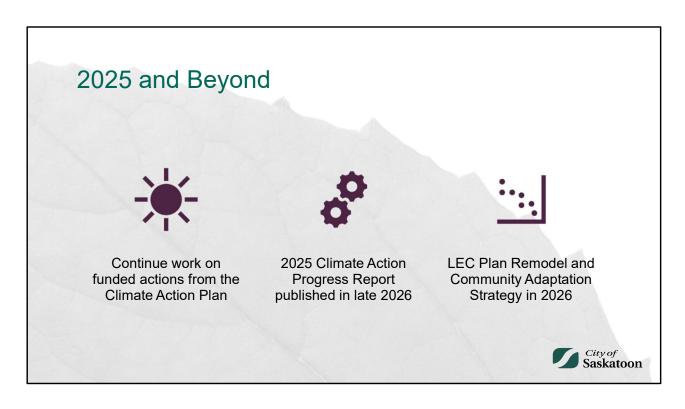
- 1) The Dundonald Avenue Solar Farm is under construction. This is the first utility-scale solar project for our city. And if you drive on circle drive south or near the Montgomery place neighbourhood, you will see the panels being installed.
- 2) The Solar Map is a self-service tool that helps residents explore the financial and environmental benefits of using rooftop solar on their home. It was launched in 2023 and will be available to residents until October of 2026.
- 3) There's continued uptake in the community for residential and commercial solar installations. City-run programs to encourage the community to install solar panels include net-metering and the home energy loan program. There is a target of 10MW of residential solar capacity by 2030 in the LEC Plan and in 2024 residential solar reached 5.253 MW.

Corporate Climate Adaptation Strategy – Progress 2024/2025 Work Climate risk projections and engagement in 2025 9-year flood control strategy approved in 2024, includes projects to reduce flooding in 10 priority areas Emergency Management Organization (EMO) develops and maintains emergency plans for various hazards including extreme weather, wildfires, and public health crises.

Updated climate projections were shared with the public and city staff this year. Training workshops on the impacts of climate change to city staff are being developed.

In December 2018, City Council approved the implementation of the nine-year million Flood Control Strategy to mitigate flooding in ten priority areas that have historically experienced frequent flooding. The Brevoort Park South Stormwater Storage and Weaver Park Dry Pond projects were completed in 2024. Construction of Cumberland Park Dry Pond, and construction of USask Dry Pond are underway.

The Emergency Management Organization (EMO) at the city is responsible for coordinating emergency preparedness, response, recovery, and business continuity efforts across the city. EMO Is responsible for the <u>Saskatoon Winter Emergency Response Plan</u> and the <u>Saskatoon Extreme Heat and Air Quality Emergency Response Plan</u> as it relates to residents vulnerable to these hazards in Saskatoon. These plans are still in place, are reviewed each year with key partners and are activated as indicated in the plans.



This slide simply summarizes what I've already said about next steps in the City's climate action file. The 2023 Climate Action Progress Report will include updated GHG inventories for 2025. And then next year will see the remodel of the LEC Plan will be published.

Website: Saskatoon.ca/climatechange

Email: sustainability@saskatoon.ca

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In conclusion, the City's Climate Action Plan requires all of us to do our part to lower GHG emissions and prepare for a changing climate. Implementing the actions in the LEC Plan will allow Saskatoon to meet its emission targets and will lead to a better quality of life for all. Implementing the actions in the Adaptation Strategy will allow Saskatoon to be better prepared and more resilient in the face of a changing climate.